RMFT
Managed File Transfer

RepliWeb

RMFT Product Suite Installation Guide

Software Version 2.5

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Preface

Purpose

This guide describes how to install the RMFT Product Suite. You can install the entire RMFT Product Suite or specific components according to your needs.

Audience

RMFT administrators.

Scope

This guide does not provide operating instructions for the installed components. For operating instructions, please refer to the relevant user guides.

Related Documentation

- *RMFT Administrator's Guide*
- *RMFT Web Client User Guide*
- *RMFT CLI Reference Guide*
- *RMFT Java CLI Reference Guide*
- *RMFT MS-Cluster Installation Guide*

Introduction

RepliWeb Managed File Transfer (RMFT) is a turnkey solution for managed, enterprise-scale file exchange. RMFT greatly improves the manageability, reliability, efficiency and security of file workflows and file transfers. RMFT's user-friendly Web interface enables end-users to exchange files with ease, while fully automated server-to-server file transfer and automated file processing provide complete "hands-off" operation. By streamlining management and administration of file transfers, RMFT removes key concerns about day-to-day file transfer processes and file workflows, allowing organizations to focus valuable resources elsewhere.

This guide provides complete installation instructions for RMFT Product Suite v2.5. RMFT Product Suite consists of various client-side and server-side components, each of which can be installed individually or as part of the overall installation. For example, if you need to set up a machine to receive files sent using SuperFAST (one of RMFT's enhanced transfer protocols), installation of the SuperFAST daemon component is all that is required. Unless you choose not to install a specific component, all RMFT components will be installed.

For a description of each of the available components, see 3. Installing Specific RMFT Components (36).

For proper operation, RMFT must be connected to one of the supported databases (MSSQL/SQL Express, or Oracle). You can configure database connectivity either during or after the installation. For more information about RMFT database requirements, see Database Requirements (10).

Installation at a Glance

RMFT can be installed on a single server, on two servers (one in the intranet and one in the DMZ) or on an MS-Cluster. The type of installation that you choose will largely depend on how RMFT will be used within your organization. For instance, if RMFT is only going to be used for internal file transfer, then installation on a single server should be sufficient. If, however, RMFT is going to be used for both internal and external file transfer then it is recommended to install RMFT on two servers – one located in the intranet and the other in the DMZ.

Before installing RMFT, make sure your system meets the Minimum System Requirements.

Use the following table to help you quickly find the installation instructions for each installation type:

Installation Type	Location of Instructions
Single RMFT Server	Continue from 2. Installing the Full RMFT Product Suite (20).
Two RMFT Servers – One in the intranet and the other in the DMZ.	Continue from 2. Installing the Full RMFT Product Suite (20). After installing RMFT on both servers, refer to the *RMFT Administrator's Guide* for instructions on setting up the DMZ Front End.
Single RMFT Server installation on an MS-Cluster.	Refer to the *Installing RMFT on an MS-Cluster* Guide.
Two RMFT Servers (one in the intranet and the other in the DMZ), each installed on a separate MS-Cluster.	Refer to the *Installing RMFT on an MS-Cluster*. After installing RMFT Server on both MS-Clusters, refer to the *RMFT Administrator's Guide* for instructions on setting up the DMZ Front End.
Installing RMFT on top of an Existing RMFT Environment.	See B. Installing RMFT in an Existing RMFT Environment.

Changes may also need to be made to your current firewall configuration. The required ports and firewall configuration are determined by several factors such as the type of installation and which protocols will be used to transfer files. For a detailed description of which ports need to be opened, see A. RMFT Port Requirements (49).

1. Installation Requirements

The following section describes the installation requirements for RMFT Product Suite v2.5 and each of its components.

- Minimum System Requirements
- Database Requirements
- IIS Requirements

Minimum System Requirements

Before installing RMFT Product Suite v2.5 or any of its components make sure that the following minimum requirements have been met. For information on installing individual components, see 3. Installing Specific RMFT Components (36).

RMFT Server

(Includes all RMFT components)

- Windows Server 2003/2008/2008 R2
- .NET Framework 3.5 Service Pack 1
- Microsoft IIS 6 or 7 (**Note:** FTP Sites requires IIS 7.5 with FTP 7.5)
- Dual Core CPU (Recommended: Quad Core CPU)
- 4 GB of RAM (Recommended: 8 GB RAM)
- Several GB of available hard disk space

RMFT Remote Administration Console

- Windows XP and above
- .NET Framework 3.5 Service Pack 1
- Pentium 4
- 512MB of RAM
- 20MB of available hard disk space

RMFT CLI and RMFT Java CLI

- Windows 2000 and above
- Pentium 3/4
- 256MB of RAM
- 10MB of available hard disk space

SuperFAST Daemon and FASTCopy Daemon

- Windows 2000 and above
- Pentium 4
- 512MB of RAM
- 20MB of available hard disk space

Database Requirements

RMFT stores system entities (user profiles, distribution lists, etc.), and package processing data in its database for immediate availability. Thus, to be able to operate properly, RMFT Server must be connected to one of the supported database types. The database can either be installed on the same machine as RMFT Server or on a remote machine.

Note A single database server can be used for multiple installations of RMFT Server. The requirements are as follows:

SQL Server - A unique database name should be provided during each installation of RMFT Server.

Oracle - Create multiple Oracle schema and use a different schema for each RMFT Server installation. The TNS name does not have to be unique.

Currently, the following databases are supported:

- SQL Server 2005 and 2008

  IMPORTANT: MSSQL and SQL Express should be configured to run in mixed authentication mode and *not* Windows authentication.

- Oracle 9.2 and above (Standard or Enterprise) excluding Oracle 11.2 which is not currently supported. See note below regarding support for Oracle 11.1.

  Note: RMFT is compatible with the patched version of **Oracle 11.1**. For information on which patch you need for your specific platform, you need to open a service request with Oracle Support for "patch 9064352 for <platform>" where <platform> is your OS and exact Oracle version (e.g. Oracle 11.1.0.7). You also need to attach the current list of one-off patches to the service request (obtained by running the `opatch lsinventory` command).

  Note: Oracle Client 64-bit is not supported.

  Note: The RMFT user name is case sensitive when using Oracle v9.2.

Database Connections Opened by RMFT Server

RMFT opens a maximum of two database connections per logged on user. The actual number of database connections per logged on user depends on how many of the requests are submitted at the same time. The average number of database connections per logged on user is one and a half, taking in to account that not all connection requests will be made at the same time. For example, in a system with

50 logged on users, the connection count can range between 50 to 100 averaging at 75.

Note: These calculations are based on logged on users. Other processes managed by RMFT such as Host-to-Host transfers, inspection policies and inbox processing (if configured) also open database connections. Thus, depending on your specific RMFT configuration, the exact number of database connections established by RMFT may exceed the numbers stated above.

Oracle Prerequisites

If you want RMFT to communicate with an Oracle database, make sure that the following prerequisites have been met.

Note: Oracle Client 64-bit is not supported.

Character Set Encoding Compatibility

To be compatible with RMFT 2.5, the Oracle `NLS_CHARACTERSET` encoding needs to be `AL32UTF8` and the `NLS_NCHAR_CHARACTERSET` encoding needs to be `AL16UTF16`.

To check the current character set encoding, run the following database query (case-sensitive):

```
SELECT PARAMETER, VALUE  FROM SYS.NLS_DATABASE_PARAMETERS
WHERE (PARAMETER = 'NLS_CHARACTERSET') OR (PARAMETER =
'NLS_NCHAR_CHARACTERSET')
```

If the `NLS_CHARACTERSET` and the `NLS_NCHAR_CHARACTERSET` are anything other than `AL32UTF8` and `AL16UTF16` respectively, they need to be migrated.

For a complete description of the character set migration procedure, see:

http://download.oracle.com/docs/cd/B10501_01/server.920/a96529/ch10.htm

Creating a TNS Server Name

Create a TNS server name for RMFT on the Oracle database server. During installation, you will be required to enter the TNS server name.

Granting the Oracle User the Required Permissions

Make sure that the Oracle user is granted the following permissions:

User Role Permissions:

- CONNECT - Default
- RESOURCE - Default

User System Permissions:

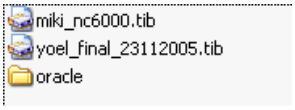
- CREATE ANY VIEW - Default
- SELECT ANY DICTIONARY - Default
- UNLIMITED TABLESPACE - Default

Changing the Default Permissions of the Oracle Client Installation Directory

For proper operation, RMFT requires the **Internet Guest Account** and the **Launch IIS Process Account** users to have **Read & Execute**, **List Folder Contents** and **Read** permissions. The default Oracle client installation does not grant these permissions.

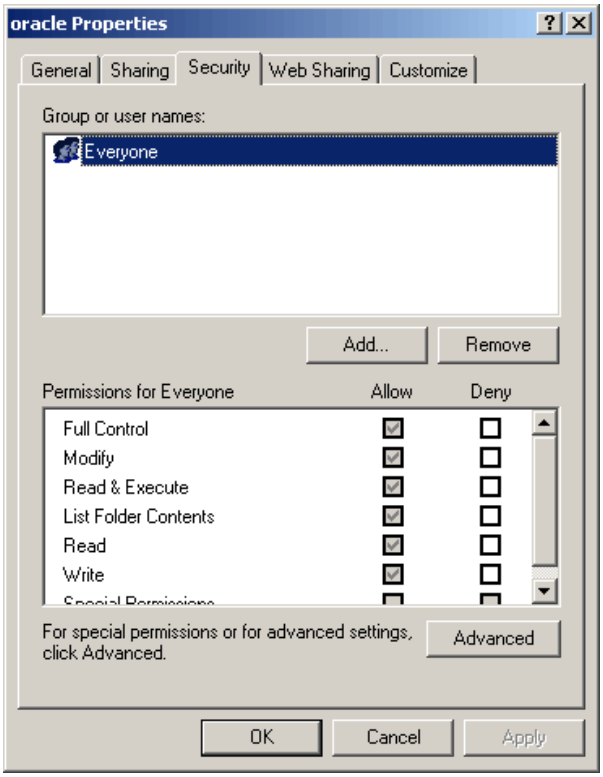
To assign the required permissions:

1. Locate the **oracle** client installation directory on your machine.



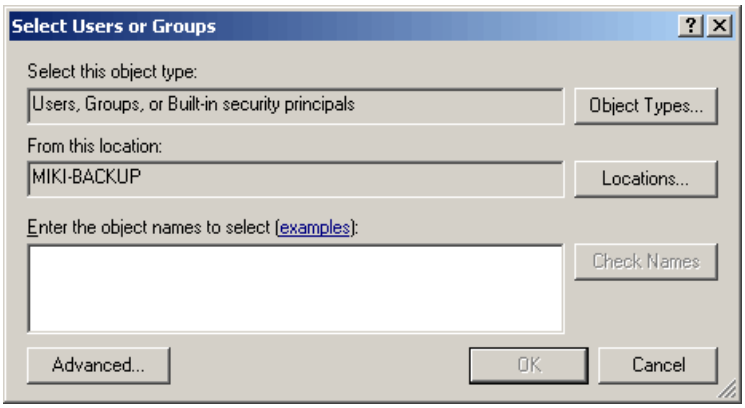
2. Right-click the **oracle** client installation directory and select **Properties**.

   The **oracle Properties** dialog box opens.



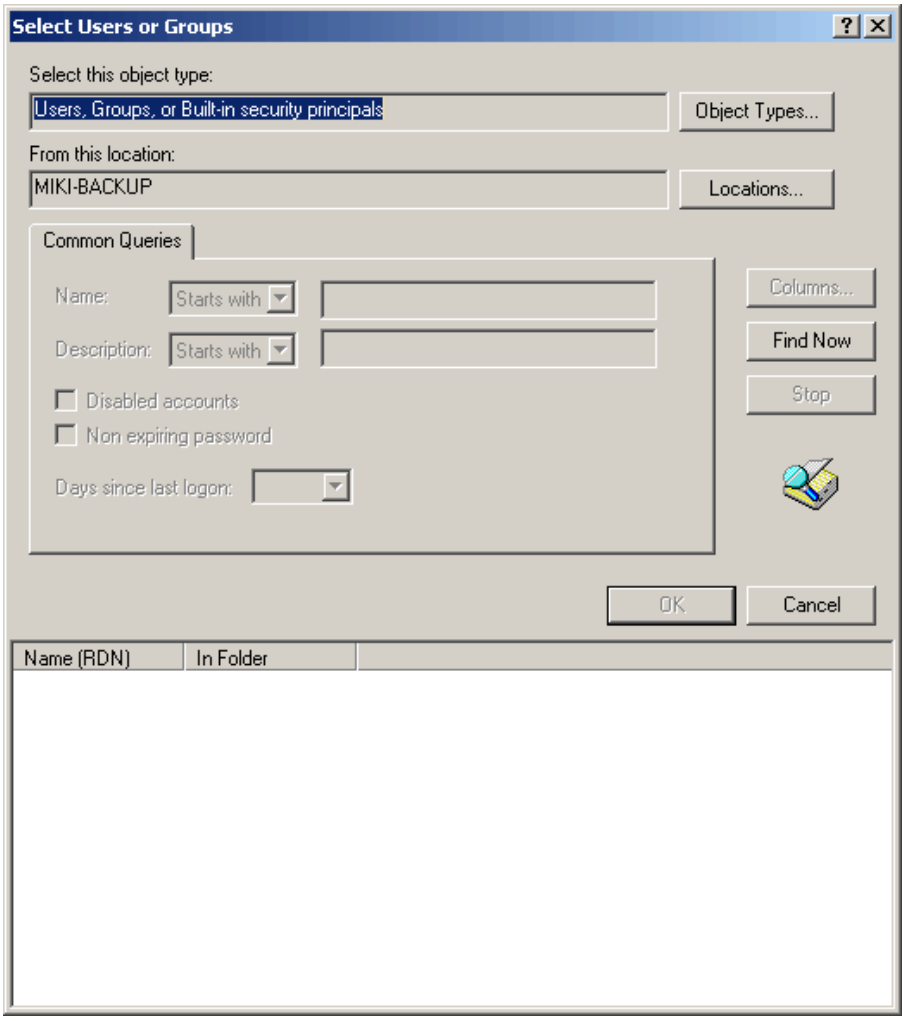
3. Click **Add**.

The **Select Users or Groups** dialog box opens.



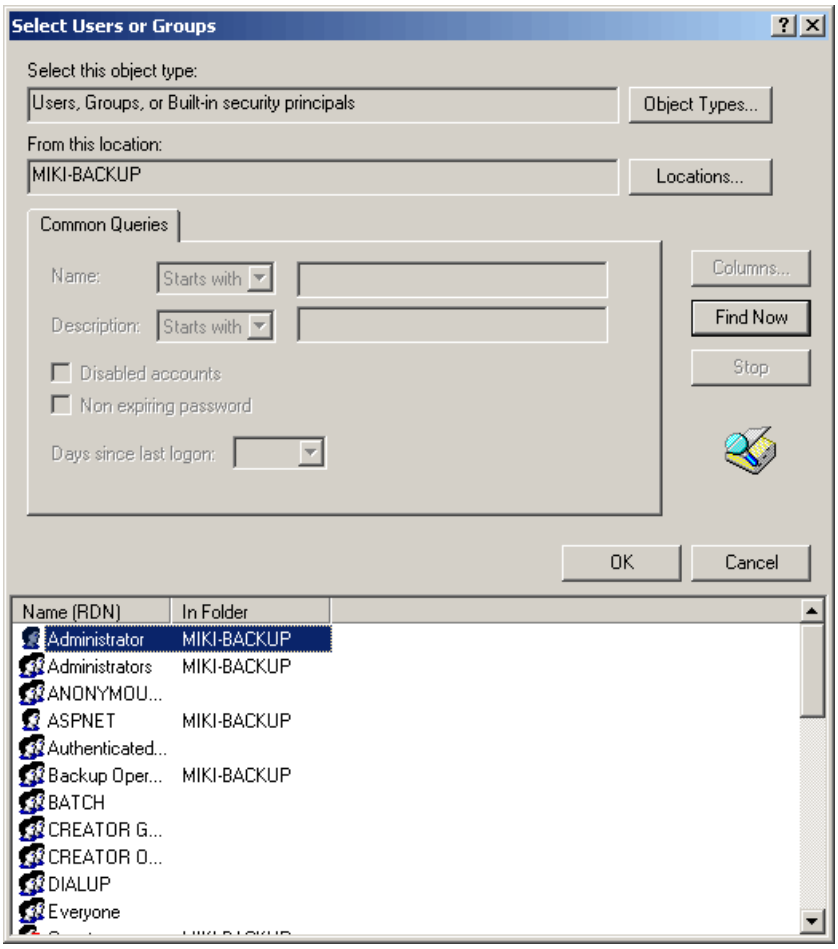
4. Click **Advanced**.

The advanced **Select Users or Groups** dialog box opens.



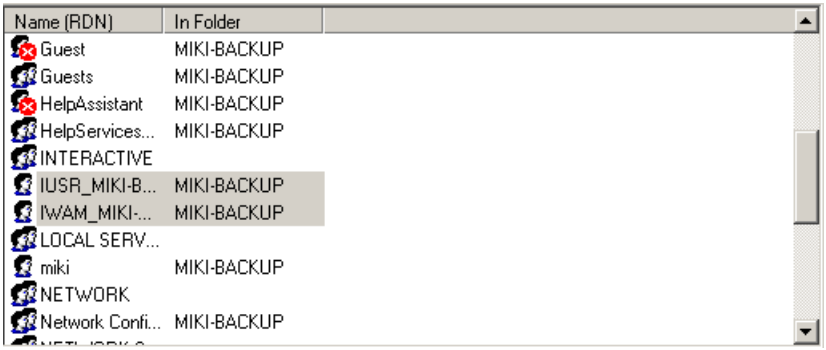
5. Click **Find Now**.

A list of all Users, Groups and Built-in security principals is displayed.



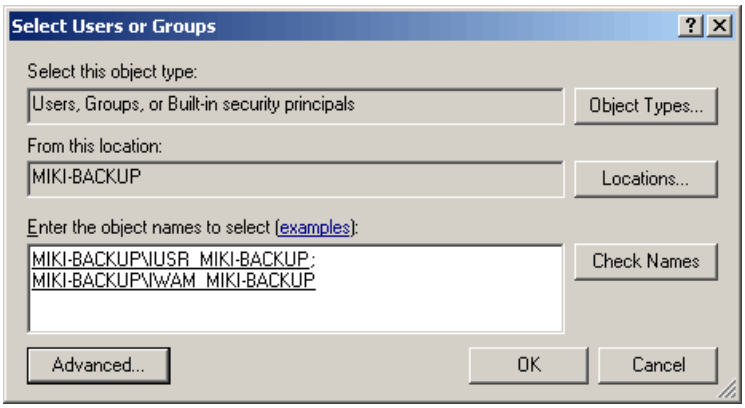
6. Select the names beginning with **IUSR_*<user>*** and **IWAM_*<user>*** as shown below.

Note: On Windows 2008 Server, the IWAM user does not exist.



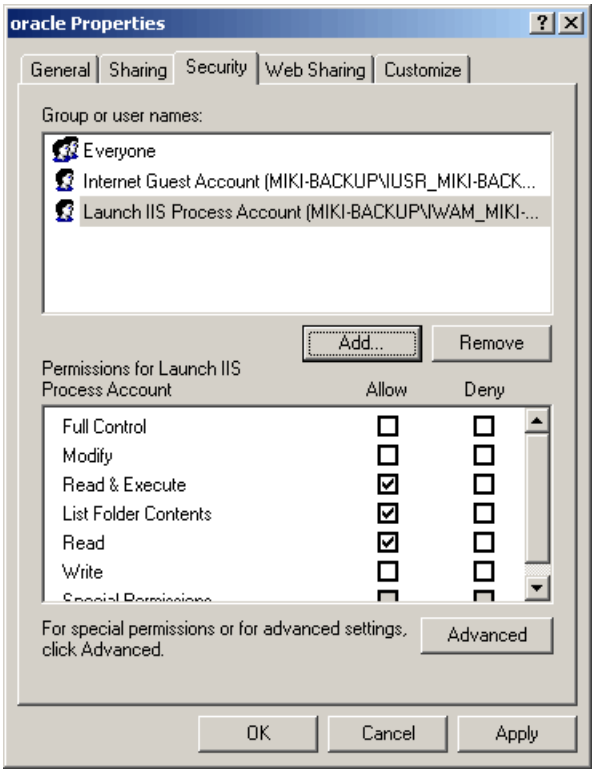
7. Click **OK**.

The names are added to the **Enter the object names to select** list.



8. Click **OK**.

   The user names are added to the **Group or user names** list in the **Security** tab.

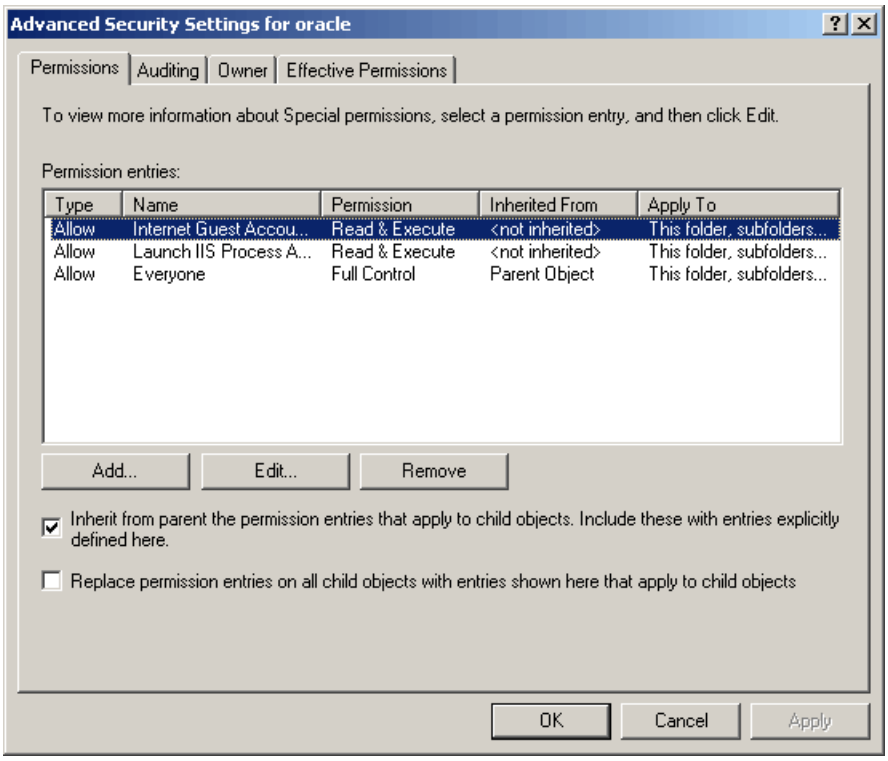


9. Select **Internet Guest Account** and then select the **Read & Execute**, **List Folder Contents** and **Read** check boxes in the **Allow** column. Click **Apply**.

10. Select **Launch IIS Process Account** and then, as before, select the **Read & Execute**, **List Folder Contents** and **Read** check boxes in the **Allow** column. Click **Apply**.

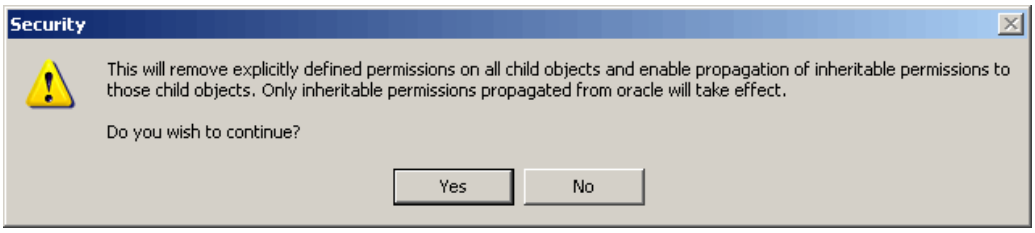
11. Click **Advanced**.

The **Advanced Security Settings for oracle** dialog box opens.



12. Hold the Shift button down and select the **Internet Guest Account** and **Launch IIS Process Account** entries.
13. Select the **Replace permission entries on all child objects with entries shown here that apply to child objects** check box. Click OK.

    The following warning is displayed.


Security
This will remove explicitly defined permissions on all child objects and enable propagation of inheritable permissions to those child objects. Only inheritable permissions propagated from oracle will take effect.
Do you wish to continue?
Yes
No

14. Click **Yes**.
15. Open the Windows **Services** console and restart the **IIS Admin** service.

IIS Requirements

To enable RMFT Web Client users to upload and download packages/files to/from RMFT Server, Microsoft IIS 6.0 or above must be installed on the RMFT Server machine *before you install* RMFT Server.

Additionally, if you require users to establish a secure connection to RMFT Server, you must install an appropriate certificate on the Default Web Site of the IIS.

Antivirus Software Requirements

During standard operation, RMFT creates and deletes a large number of temporary working files and regularly accesses its configuration files. If any of these files should be locked by an antivirus scan (or any other third party program) while RMFT is trying to access it, a number of problems could occur, ranging from slowing down the system at best to actual data loss at worst.

Below is a list of files that should be excluded from the antivirus scan. The **Potential Problems** column indicates problems that may occur on the RMFT system if you choose not to exclude the specified file.

The files in the following table are located under the RMFT installation directory (`C:\Program Files\RepliWeb\RMFT` by default).

File to Exclude from Scan	Potential Problems
\monitor\messages**New_Messages.cyc**	Hard Disk filling up. Loss of Data. RMFT system failure.
\monitor\messages**Old_Messages.cyc**	Hard Disk filling up. Loss of Data. RMFT system failure.
\fest\central_configuration**fest.config**	Inability to submit jobs. RMFT malfunction.
\gqs\config**gqs.cf**	RMFT will not be able to submit new jobs Inability to connect to RMFT manager. System jobs will not function properly. RMFT malfunction.

The files in the following table are located under the RMFT root directory (`C:\RMFT` by default).

File to Exclude from Scan	Potential Problems
\Config**bhub.cf**	RMFT will not connect to RMFT Database. Inability to connect to RMFT manager. System Jobs will not function properly. RMFT malfunction.

2. Installing the Full RMFT Product Suite

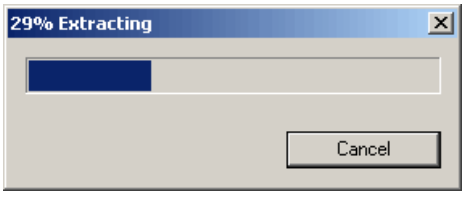
The RMFT Product Suite can also be installed in user mode. This effectively insulates the operating system from RMFT processes.

To install RMFT Product Suite v2.5:

1. Copy the RMFT self-extracting installation file (**RMFT_<*version*>.exe**) to a directory on your computer.
2. Double-click **RMFT_<*version*>.exe**.

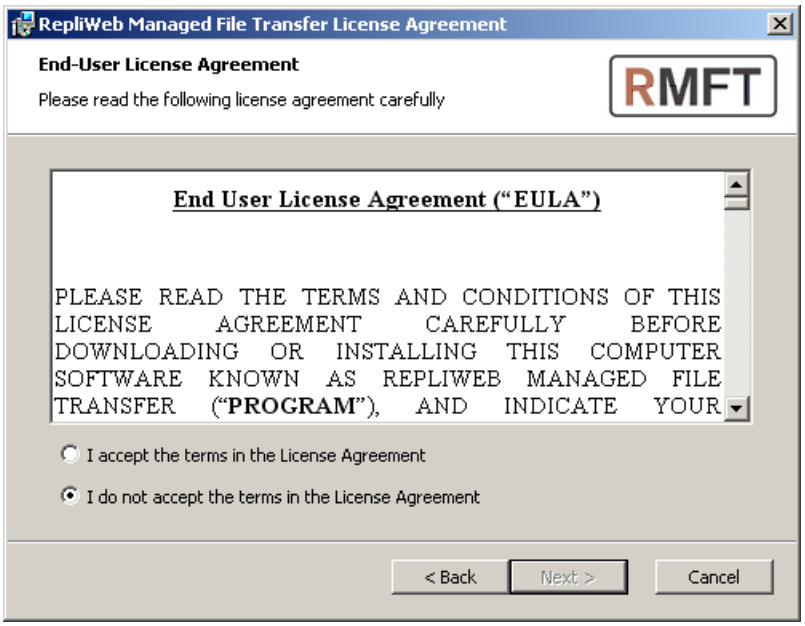
   Note: On Windows Server 2008, right-click the **RMFT_<version>.exe file** and select **Run as administrator.**

   The RMFT Setup files are extracted to a temporary directory:

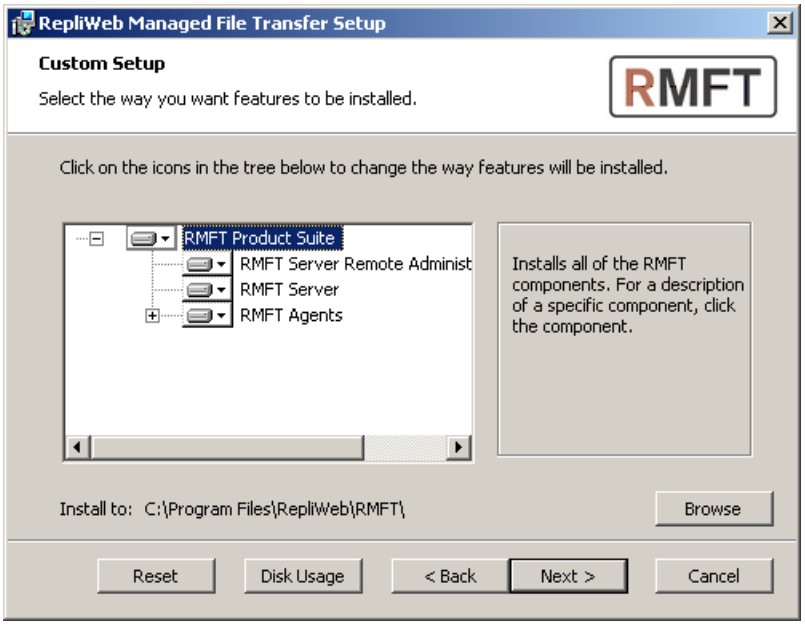
   After the files are extracted the Setup wizard opens and the **Welcome** screen is displayed.
3. Click **Next**.

The **End-User License Agreement** screen is displayed.


RepliWeb Managed File Transfer License Agreement
End-User License Agreement
Please read the following license agreement carefully
RMFT
End User License Agreement ("EULA")
PLEASE READ THE TERMS AND CONDITIONS OF THIS LICENSE AGREEMENT CAREFULLY BEFORE DOWNLOADING OR INSTALLING THIS COMPUTER SOFTWARE KNOWN AS REPLIWEB MANAGED FILE TRANSFER ("PROGRAM"), AND INDICATE YOUR
I accept the terms in the License Agreement
I do not accept the terms in the License Agreement
< Back
Next >
Cancel

4. Select **I accept the terms in the License Agreement** and then click **Next**.

The **Custom Setup** screen is displayed.


RepliWeb Managed File Transfer Setup
Custom Setup
Select the way you want features to be installed.
RMFT
Click on the icons in the tree below to change the way features will be installed.
RMFT Product Suite
RMFT Server Remote Administ
RMFT Server
RMFT Agents
Installs all of the RMFT components. For a description of a specific component, click the component.
Install to: C:\Program Files\RepliWeb\RMFT\
Browse
Reset
Disk Usage
< Back
Next >
Cancel

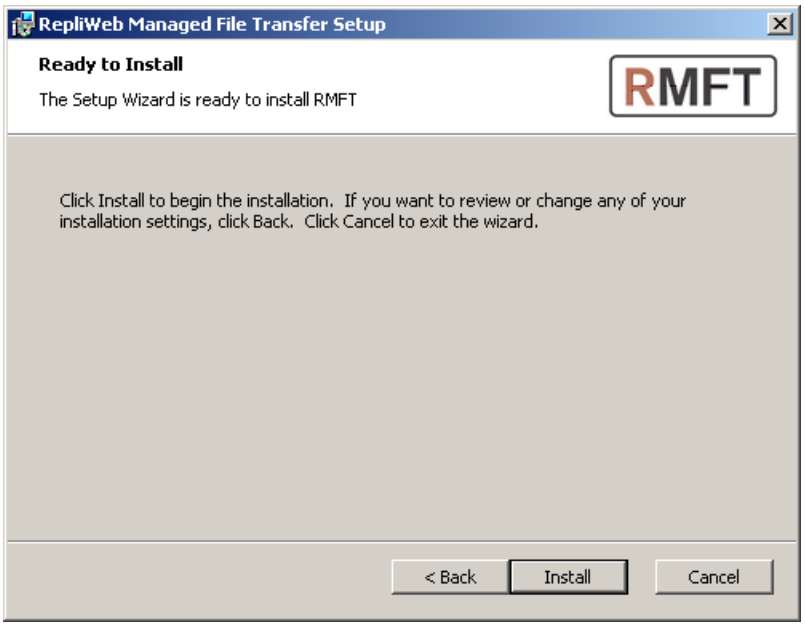
5. To change the default installation directory, click **Browse** and select a different directory.

Note: In addition to the application files, all data transferred using RMFT will also reside on the same drive, but in a different location (specified at a later stage of the installation). Therefore, make sure that the selected drive has sufficient disk space to store the application files *and* the transferred data. The amount of space required will depend on the volume of data being transferred and the RMFT package purge policy. For more information on defining a package purge policy, refer to chapter 14 of the *RMFT Administrator's Guide:* **Configuring the Expiration and Notification Process**.

A description of each component is displayed in the area to the right of the available components. If you only need to install specific components see 3. Installing Specific RMFT Components (36).

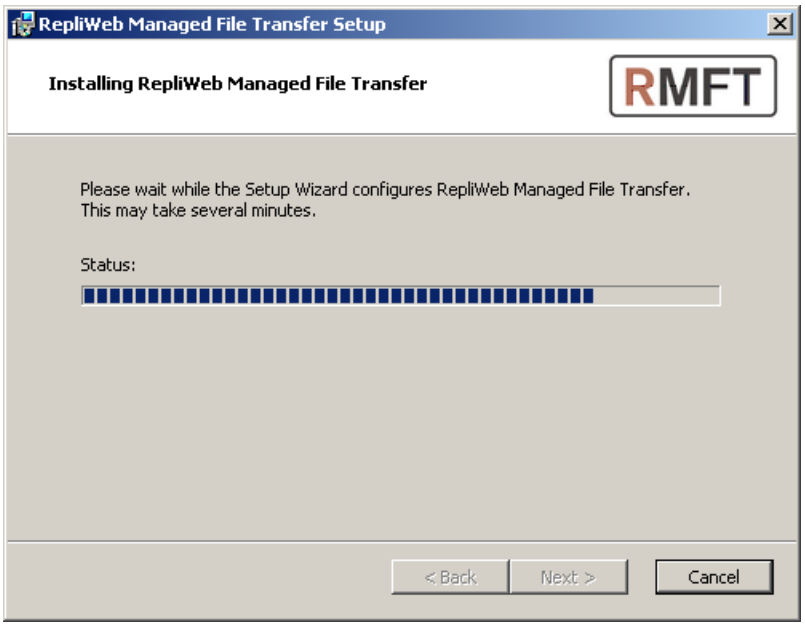
6. To install all of the components, click **Next**.

   The **Ready to Install** screen is displayed.

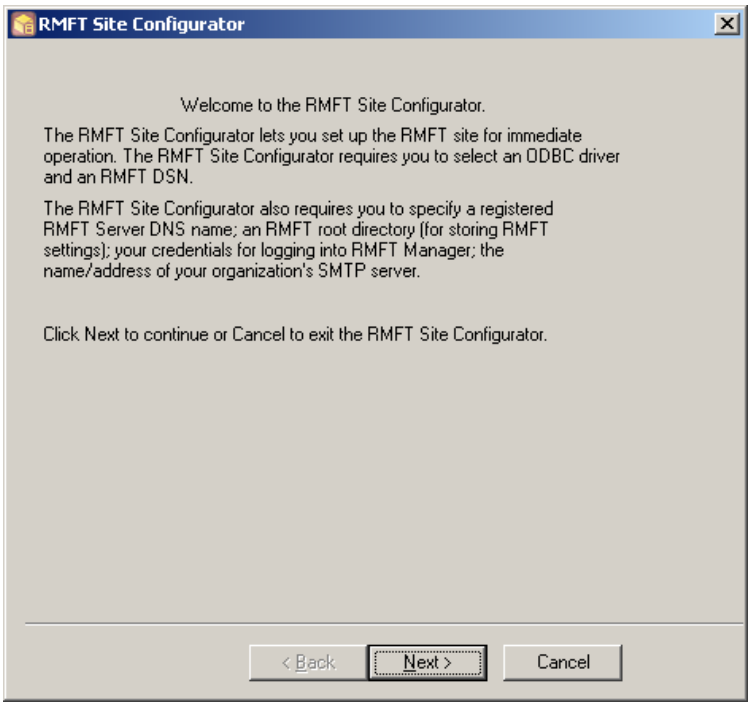

RepliWeb Managed File Transfer Setup
Ready to Install
The Setup Wizard is ready to install RMFT
RMFT
Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
< Back
Install
Cancel

7. Click **Install**.

The RepliWeb RMFT Product Suite installation begins.


RepliWeb Managed File Transfer Setup
Installing RepliWeb Managed File Transfer
RMFT
Please wait while the Setup Wizard configures RepliWeb Managed File Transfer.
This may take several minutes.
Status:
< Back
Next >
Cancel

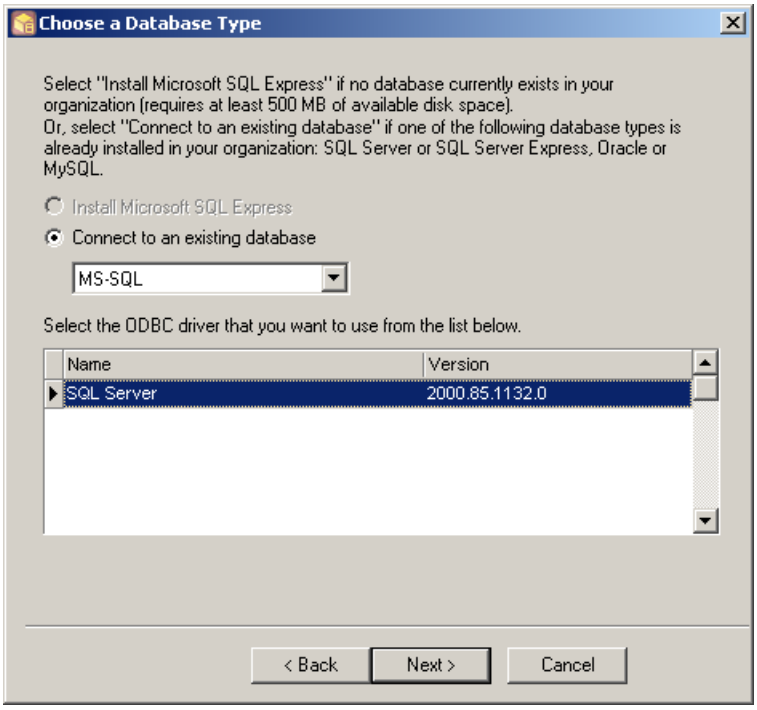
When the installation completes, the RMFT Site Configurator opens.


RMFT Site Configurator
Welcome to the RMFT Site Configurator.
The RMFT Site Configurator lets you set up the RMFT site for immediate operation. The RMFT Site Configurator requires you to select an ODBC driver and an RMFT DSN.
The RMFT Site Configurator also requires you to specify a registered RMFT Server DNS name; an RMFT root directory (for storing RMFT settings); your credentials for logging into RMFT Manager; the name/address of your organization's SMTP server.
Click Next to continue or Cancel to exit the RMFT Site Configurator.
< Back
Next >
Cancel

The RMFT Site Configurator requires you to configure database connectivity, e-mail settings, RMFT Web Site security options, and other site-specific settings. If you quit the RMFT Site Configurator at any time, you will be prompted to run it when you open the RMFT Management Console.

8. Click **Next**.

The **Choose a Database Type** screen is displayed.


Choose a Database Type
Select "Install Microsoft SQL Express" if no database currently exists in your organization (requires at least 500 MB of available disk space).
Or, select "Connect to an existing database" if one of the following database types is already installed in your organization: SQL Server or SQL Server Express, Oracle or MySQL.
Install Microsoft SQL Express
Connect to an existing database
MS-SQL
Select the ODBC driver that you want to use from the list below.
Name
Version
SQL Server
2000.85.1132.0
< Back
Next >
Cancel

9. Choose either:

Install Microsoft SQL Express to install Microsoft SQL Express on the RMFT Server machine.

Note: The Install Microsoft SQL Express option will not be available if one of the supported database types is already installed on the RMFT Server machine.

-OR-

Connect to an existing database to connect to a database within your organization. If you select this option, you must also select a database type from the drop-down list and an ODBC driver from the list that follows **Select the ODBC driver that you want to use from the list below.**

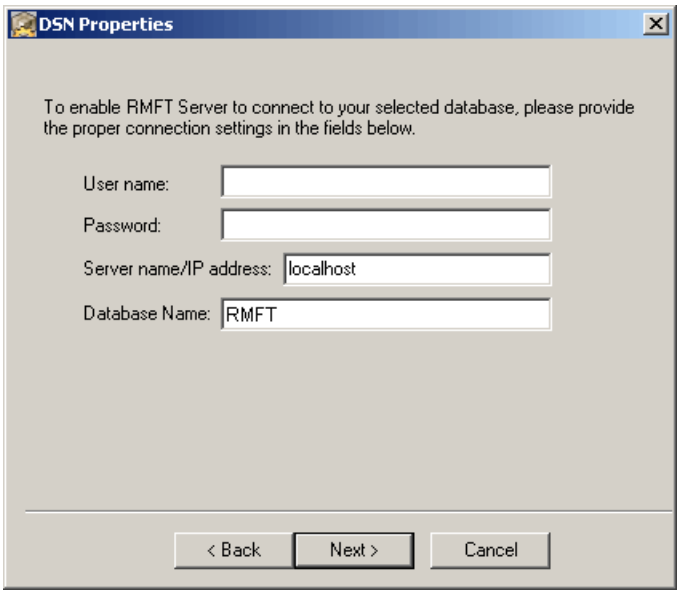
10. Click **Next**. If you selected **Connect to an existing database**, continue below from The **DSN Properties** screen is displayed. If you selected **Install Microsoft SQL Express**, the **SQL Server Express Details** screen will be displayed.

11. (Skip this step if you selected **Connect to an existing database**) Specify a password for the SQL Server Express sa account and, optionally, change the default installation directory. Click **Next** and then continue from Step 13.

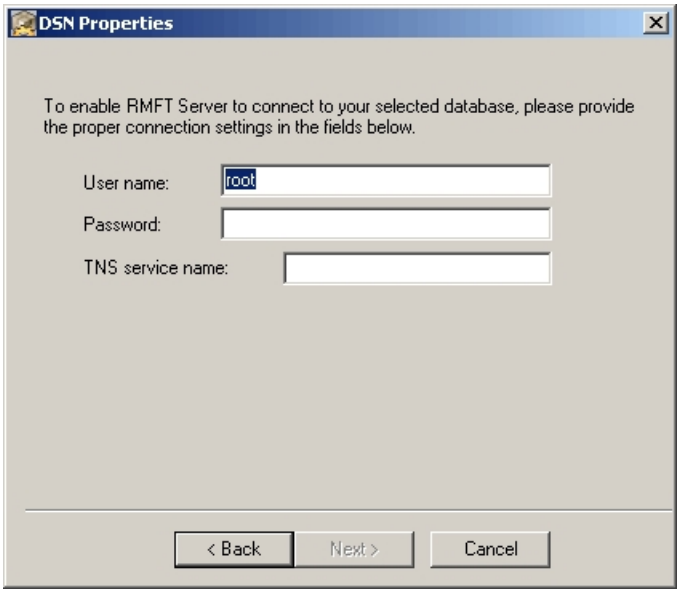
The **DSN Properties** screen is displayed.

Note: The fields displayed in the **DSN Properties** screen are determined by the database type that you selected. A description of the fields is provided in step 10 below.

If you selected **MS-SQL**, the following screen is displayed.



If you selected **Oracle**, the following screen is displayed.


DSN Properties
To enable RMFT Server to connect to your selected database, please provide the proper connection settings in the fields below.
User name:
root
Password:
TNS service name:
< Back
Next >
Cancel

12. To enable database connectivity, complete the fields in the **DSN Properties** screen as follows:

a. In the **User name** and **password** fields, specify your database login credentials.

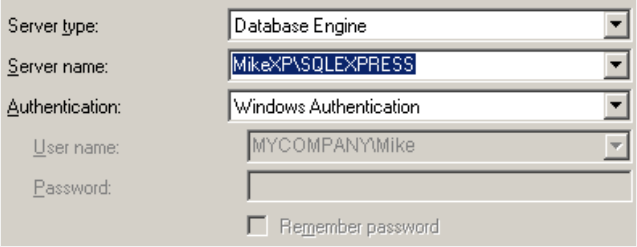
b. This step applies to SQL Server/SQL Server Express only. In the **Server name/IP address** field, specify the name of IP address of the machine on which the database server is installed.

IMPORTANT: If you are using SQL Express, the **Server name/IP address** should be entered using the following format:

<machine_name>\<SQLSERVER_instance_name> (usually SQLEXPRESS)

Example: MikeXP\SQLEXPRESS

If you are unsure what to enter in the **Server name/IP address** field, open the SQL Server Management Studio Express console and copy the text from the **Server name** field.



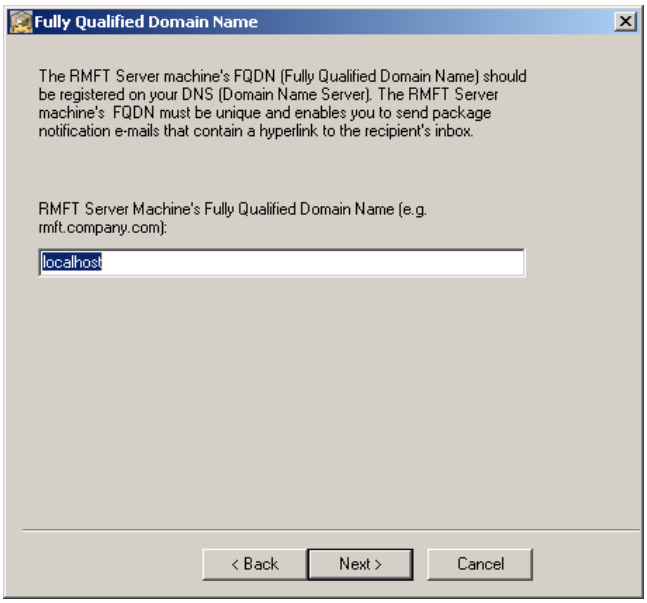
c. This step applies to SQL Server/SQL Server Express only. In the **Database Name** field, you can either keep the default name or change the database name. Setup will create the database with the specified database name.

d. This step applies to **Oracle** only. In the **TNS service name** field, specify the name of the TNS Service that you created on the Oracle database server.

Note: If you want to connect multiple installations of RMFT Server to the same database server, you need to specify a different **Database Name** (SQL Server/SQL Server Express) or **schema** (Oracle) for each installation.

13. Click **Next**.

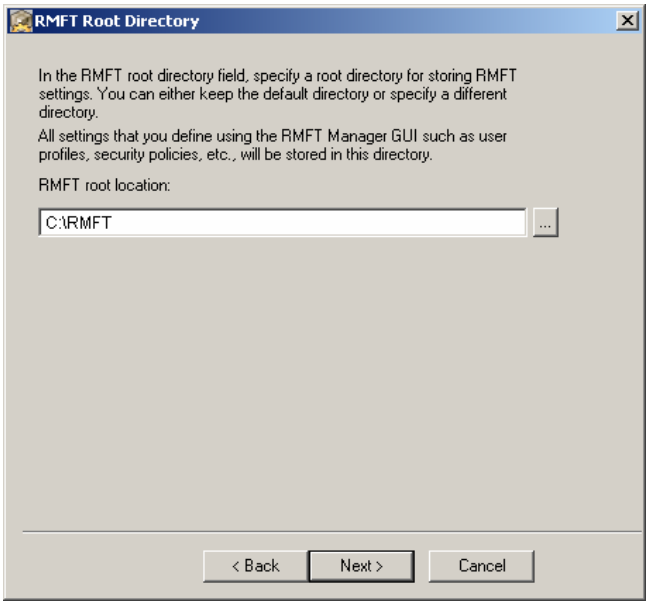
The **Fully Qualified Domain Name** screen is displayed.


Fully Qualified Domain Name
The RMFT Server machine's FQDN (Fully Qualified Domain Name) should be registered on your DNS (Domain Name Server). The RMFT Server machine's FQDN must be unique and enables you to send package notification e-mails that contain a hyperlink to the recipient's inbox.
RMFT Server Machine's Fully Qualified Domain Name (e.g. rmft.company.com):
localhost
< Back
Next >
Cancel

The RMFT administrator can configure RMFT Server to notify users when new packages are distributed to their RMFT Server inbox. The notification e-mails can contain hyperlinks that allow users to access the new package directly (after logging in) or download the packages files without logging in. To implement the hyperlink feature, you must specify the RMFT Server machine's Fully Qualified Domain Name as it is registered on your DNS.

14. In the **Registered RMFT Server DNS name** field, specify the RMFT Server DNS name and then click **Next**.

The **RMFT Root Directory** screen is displayed.

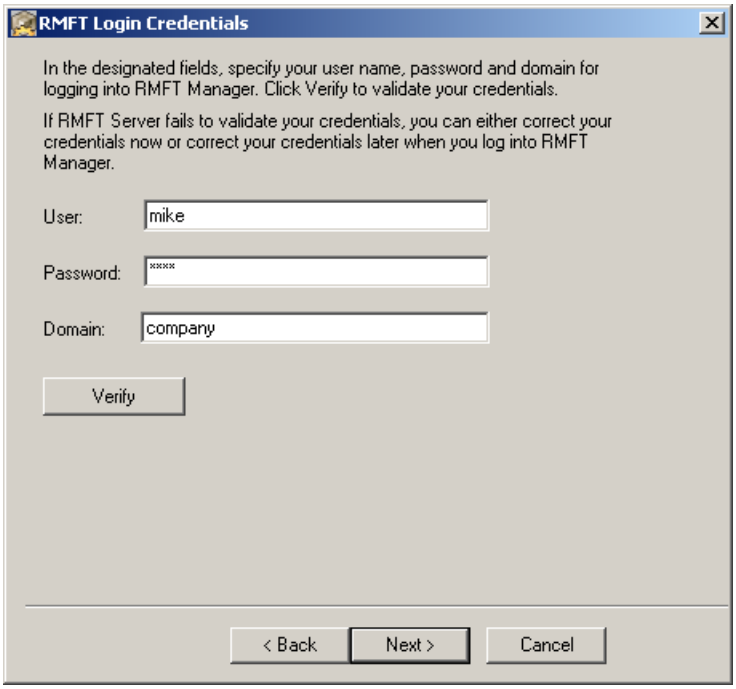

RMFT Root Directory
In the RMFT root directory field, specify a root directory for storing RMFT settings. You can either keep the default directory or specify a different directory.
All settings that you define using the RMFT Manager GUI such as user profiles, security policies, etc., will be stored in this directory.
RMFT root location:
C:\RMFT
...
< Back
Next >
Cancel

15. Read the embedded text and then either keep the default RMFT root directory or change the RMFT root directory.

    Note The root directory must reside on the same drive as the RMFT installation. If you specify a different drive, a warning will be displayed.

16. Click **Next**.

    The **RMFT Login Credentials** screen is displayed.

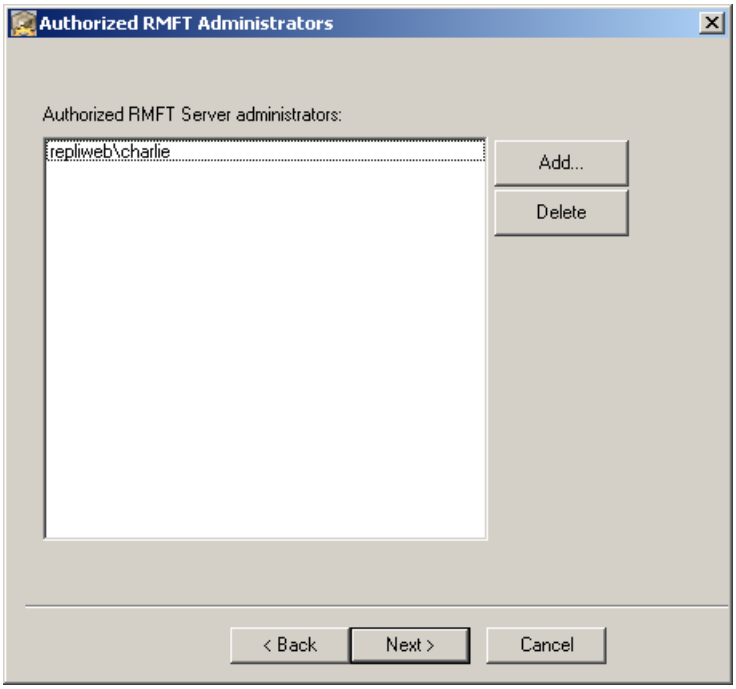

RMFT Login Credentials
In the designated fields, specify your user name, password and domain for logging into RMFT Manager. Click Verify to validate your credentials.
If RMFT Server fails to validate your credentials, you can either correct your credentials now or correct your credentials later when you log into RMFT Manager.
User:
mike
Password:
****
Domain:
company
Verify
< Back
Next >
Cancel

17. In the **User**, **Password** and **Domain** fields, enter the credentials under which you want RMFT Server to run. These are also the default administrator credentials for logging in to RMFT Server. Click **Verify** to confirm the validity of the credentials (recommended).

18. Click **Next**.

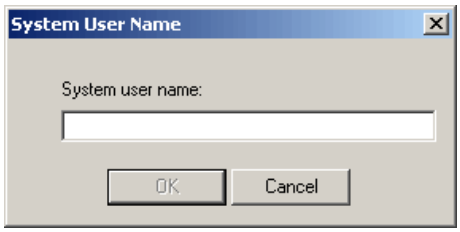
The **Authorized RMFT Administrators** screen is displayed.

You can enable other administrators to manage the RMFT application by adding their accounts to the list of authorized RMFT Server administrators. The default administrator account (using the credentials that you entered in the previous screen) can be deleted after you add other accounts.



a. To add an RMFT administrator, click **Add**:

The **System User Name** dialog box is displayed.



b. In the **System user name** field, specify the administrator's system user name using the following format:

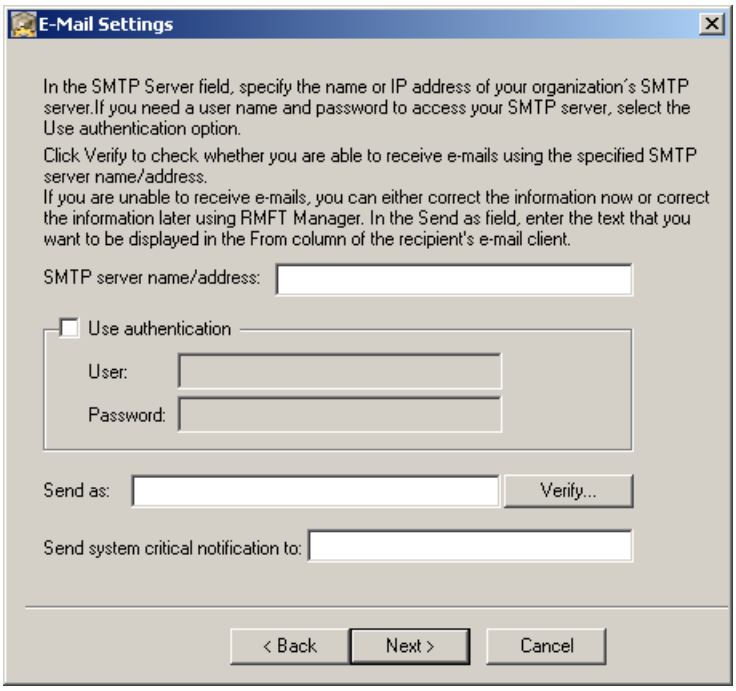
```
domain\user name
```

c. Click **OK** to add the user to the list of authorized RMFT Server administrators.

d. To remove an administrator from the list, select the administrator and then click **Delete**.

19. Click **Next**.

The **E-Mail Settings** screen is displayed.


E-Mail Settings
In the SMTP Server field, specify the name or IP address of your organization´s SMTP server.If you need a user name and password to access your SMTP server, select the Use authentication option.
Click Verify to check whether you are able to receive e-mails using the specified SMTP server name/address.
If you are unable to receive e-mails, you can either correct the information now or correct the information later using RMFT Manager. In the Send as field, enter the text that you want to be displayed in the From column of the recipient's e-mail client.
SMTP server name/address:
Use authentication
User:
Password:
Send as:
Verify...
Send system critical notification to:
< Back
Next >
Cancel

Your e-mail settings are required in order to send e-mails to users notifying them of new or unopened packages. You can also request to receive a notification in the unlikely event that a system failure occurs.

20. Configure e-mail settings as follows:

a. In the **SMTP server name/address** field, specify the server name or address of your SMTP server.

b. If your SMTP Server requires a user name and password, select **Use authentication** and then specify your user name and password in the designated fields.

c. In the **Send as** field, specify the text that you want to be displayed in the **From** column of the recipient's e-mail client.

d. Optionally, click the **Verify** button.

If you click the **Verify** button, the **SMTP Server Verification** dialog box opens.

e. Specify an e-mail address in the **E-mail address** field and then click **OK** to send an e-mail using the specified SMTP server.

f. In the **Send system critical notification to** field, specify an e-mail address to which you want e-mails notifying you of system failure to be sent.

System failure will occur if the RMFT Monitor Server service encounters a problem preventing it from queuing new messages for the database. In such a case, the RMFT Fest Server and RMFT

Scheduler services (which are critical for normal operation) will be stopped.

21. Click **Next**.

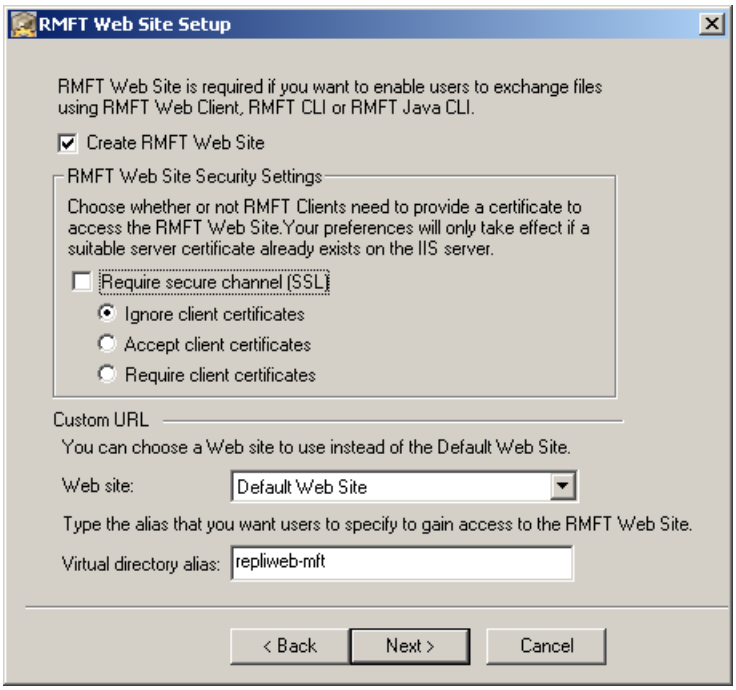
If you provided your organization's SMTP details, the **Unauthenticated Download** screen will be displayed. If you did not provide your SMTP details, continue from The **RMFT Web Site Setup** screen is displayed.

22. (Skip this step if you did not provide your organization's SMTP details) To allow users to download files without logging in, select **Allow users to download files without logging in**. To also make the package files available as a zip file, select **Also allow files to be downloaded as a zip file**.

Click **Next**.

Note: Users will not be able to download files without logging in until the "New Package in Inbox (Unauthenticated Download)" notification is enabled in their account settings.

The **RMFT Web Site Setup** screen is displayed.


RMFT Web Site Setup
RMFT Web Site is required if you want to enable users to exchange files using RMFT Web Client, RMFT CLI or RMFT Java CLI.
Create RMFT Web Site
RMFT Web Site Security Settings
Choose whether or not RMFT Clients need to provide a certificate to access the RMFT Web Site.Your preferences will only take effect if a suitable server certificate already exists on the IIS server.
Require secure channel (SSL)
Ignore client certificates
Accept client certificates
Require client certificates
Custom URL
You can choose a Web site to use instead of the Default Web Site.
Web site:
Default Web Site
Type the alias that you want users to specify to gain access to the RMFT Web Site.
Virtual directory alias:
repliweb-mft
< Back
Next >
Cancel

a. To install a fully automated system with no user interaction, clear the **Create RMFT Web Site** check box.

b. To require users to connect using a secure channel (SSL), select the **Require secure channel (SSL)** check box.

c. Select one of the following options as appropriate:

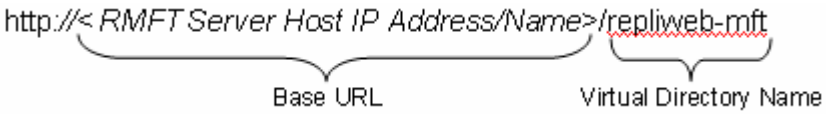
Ignore client certificates - to prevent users from using a certificate to authenticate their identity to RMFT Server.

Accept client certificates - to enable users to authenticate their identity to RMFT Server, even if not required. This option requires an appropriate certificate to be installed on the IIS Server.

Require client certificates - to require users to authenticate their identity when connecting to RMFT Server (only available if the **Require secure channel (SSL)** check box is selected). This option requires an appropriate certificate to be installed on the IIS Server.

Selecting a Custom Web Site

To access RMFT Web Client, RMFT users need to specify the address of the RMFT Web Site. The default address is:



The address consists of a base URL (i.e. the Web site) followed by a virtual directory name. You can select a different Web site and Virtual Directory name to use instead of the defaults. This is especially useful if your users are already familiar with one of your existing Web sites or if you simply want to use your own corporate Web site address as the base URL.

To further simplify access, you can configure IIS to redirect the RMFT Web Site to the RMFT Virtual Directory. This way, users will be able to access the RMFT Web Site without specifying the name of the RMFT virtual directory. For more information, please refer to Appendix L of the *RMFT Administrator's Guide*.

To select a different Web site:

- From the **Web site** drop-down list, select the Web site that you want to use. The drop-down list displays a list of all Web sites currently configured on your IIS.

  Make sure that your DNS Server is configured to resolve the selected Web site with the actual URL that your users need to specify.

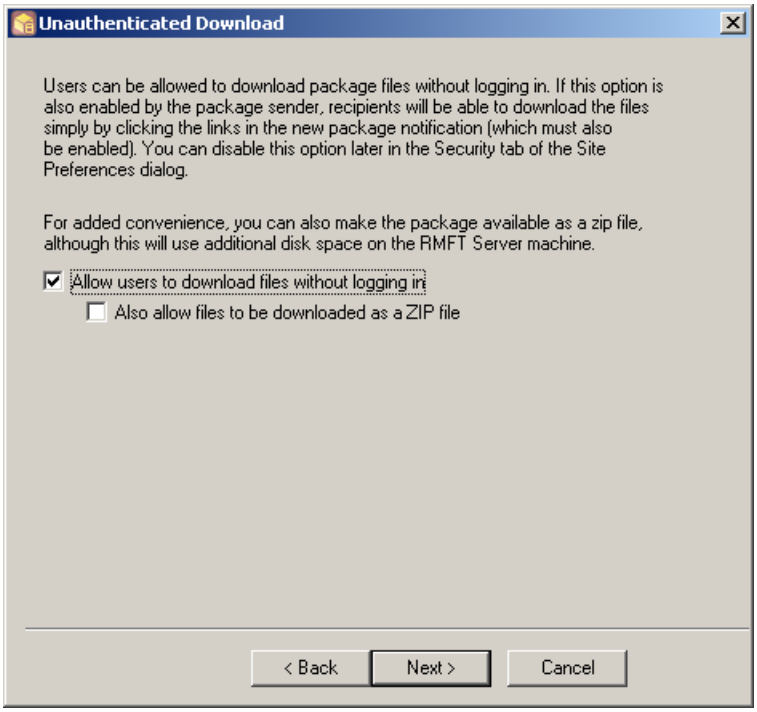
To select a different Virtual directory name:

- In the **Virtual directory name** field, type the virtual directory name that you want your users to specify after the base URL.

  RMFT will create the Virtual directory under the selected Web site.

23. Click **Next**.

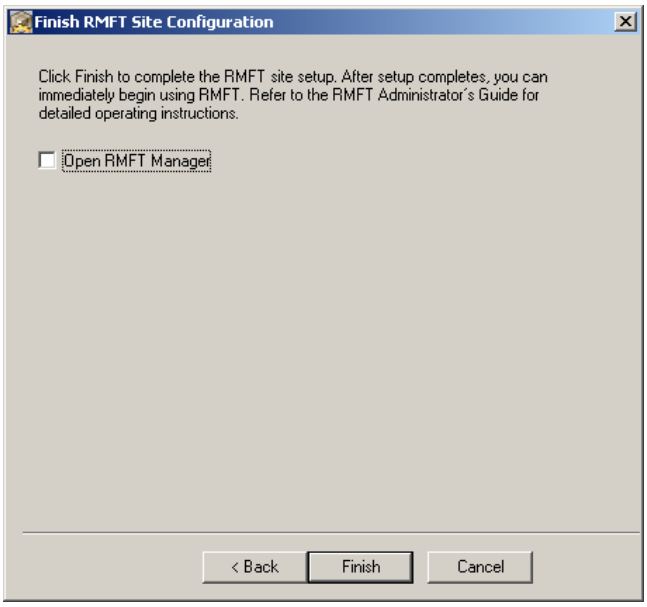
If you configured the **E-mail Settings** screen in step 20, the **Unauthenticated Download** screen will be displayed. Otherwise, the Finish RMFT Site Configuration screen will be displayed.


Unauthenticated Download
Users can be allowed to download package files without logging in. If this option is also enabled by the package sender, recipients will be able to download the files simply by clicking the links in the new package notification (which must also be enabled). You can disable this option later in the Security tab of the Site Preferences dialog.
For added convenience, you can also make the package available as a zip file, although this will use additional disk space on the RMFT Server machine.
Allow users to download files without logging in
Also allow files to be downloaded as a ZIP file
< Back
Next >
Cancel

By default, users need to authenticate their identity (by entering a username and password) before downloading packages. This ensures that the package will only be downloaded by the intended recipients. In trusted environments however, the security provided by the login process may not be required and may even be a hindrance to non-savvy users. In these and similar cases, you can allow users to download packages without logging in. For more information on enabling the Unauthenticated Download feature, please refer to the *RMFT Administrator's Guide.*

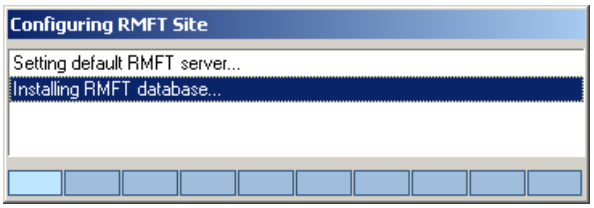
24. To enable users to download files without logging in, select **Allow users to download files without logging in**. To enable users to download package files as a zip file, select **Also allow files to be downloaded as a ZIP file.**

The **Finish RMFT Site Configuration** screen is displayed.


Finish RMFT Site Configuration
Click Finish to complete the RMFT site setup. After setup completes, you can immediately begin using RMFT. Refer to the RMFT Administrator's Guide for detailed operating instructions.
Open RMFT Manager
< Back
Finish
Cancel

25. To open RMFT Manager when you click the **Finish** button, select the **Open RMFT Manager** check box.
26. Click the **Finish** button.

    The **Configuring RMFT Site** progress screen is displayed.



If you selected **Install SQL Server Express** in Step 9, SQL Server Express will be installed at this stage. The installation does not require any user interaction.

When the RMFT installation completes, the following confirmation is displayed.

27. Click **OK**.

    The final screen is displayed.
28. Click **Finish** to exit Setup.

To view the RMFT components in the Windows Start menu (excluding CLI components):

- In the Windows **Start** menu, select **All Programs > RepliWeb > Managed File Transfer**.

  For operating instructions, refer to the related documentation (v).

3. Installing Specific RMFT Components

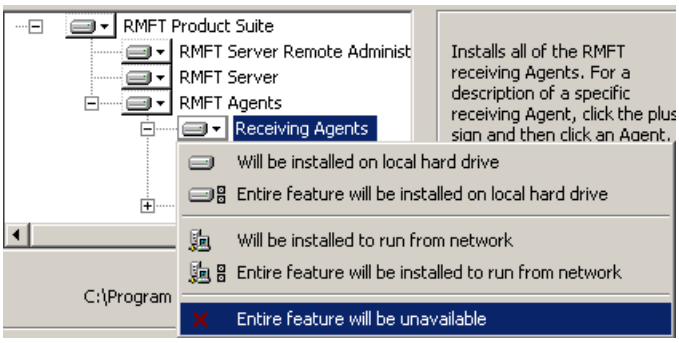
You can install any of the RMFT Product Suite components according to your needs. For instance, if you only need to send packages to an existing RMFT Server, then you should install one or more of the RMFT Sending Agents as appropriate. Likewise, if you only need to receive packages sent using FASTCopy or SuperFAST protocols, then you should install the appropriate RMFT Receiving Agent(s). The table below provides a description of each of the RMFT components as they appear in the Custom Setup screen.

RMFT Product Suite Components:

RMFT Component	Description
RMFT Product Suite	Installs all of the RMFT components. See 2. Installing the Full RMFT Product Suite (20).
RMFT Server	Installs all of the RMFT components. See 2. Installing the Full RMFT Product Suite (20).
RMFT Server Remote Administration Console	Does not install RMFT Server. Only installs the remote administration component. The remote administration component enables you to manage RMFT Server from a remote machine.
RMFT Agents	Installs all of the RMFT sending and receiving Agents.
Receiving Agents	Installs all of the RMFT receiving Agents.
- SuperFAST Daemon	Enables receipt of files or packages sent using RepliWeb's SuperFAST protocol.
- FASTCopy Daemon	Enables receipt of files or packages sent using RepliWeb's FASTCopy protocol.
Sending Agents	Installs all of the RMFT sending Agents.
- Native Agents	Enables packages to be sent using RMFT CLI or RMFT Java CLI.
- FASTCopy Agent	Enables packages to be sent using RMFT CLI or RMFT Java CLI.

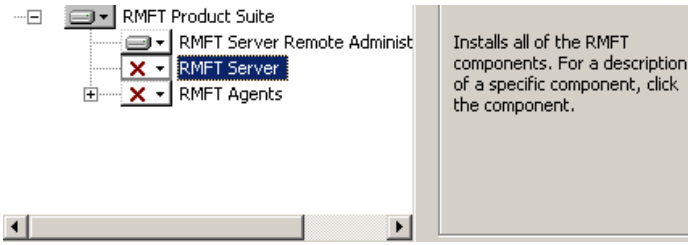
To install specific components:

1. Perform steps 1-5 of 2. Installing the Full RMFT Product Suite (20).
2. To install specific components, click each of the components that you *do not* want to install (or - if modifying the installation - that you want to uninstall) and select **Entire feature will be unavailable**.


RMFT Product Suite
RMFT Server Remote Administ
RMFT Server
RMFT Agents
Receiving Agents
Installs all of the RMFT receiving Agents. For a description of a specific receiving Agent, click the plus sign and then click an Agent.
Will be installed on local hard drive
Entire feature will be installed on local hard drive
Will be installed to run from network
Entire feature will be installed to run from network
C:\Program
Entire feature will be unavailable

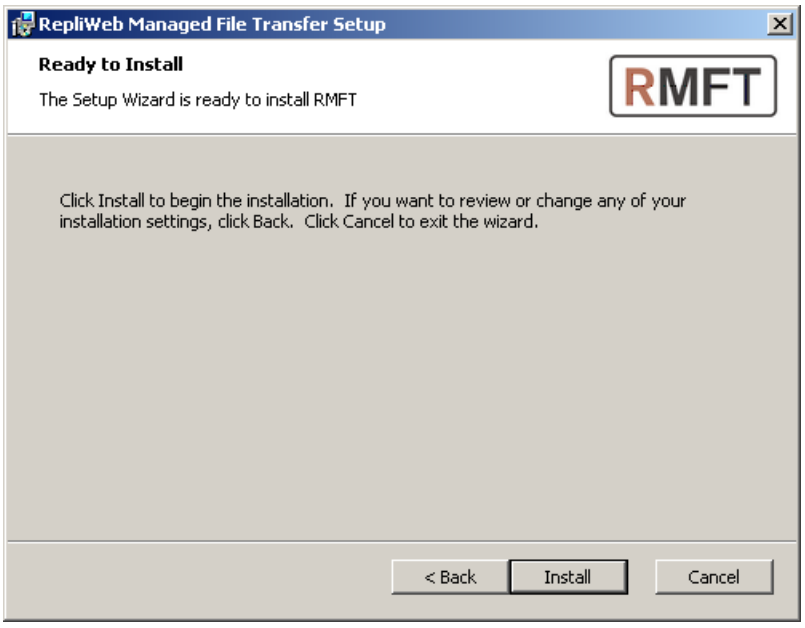
The remaining components will be installed. For a description of each of the components, see RMFT Components (36).

For example, to only install the RMFT Server Remote Administration Console, the **Custom Setup** screen should look like this:


RMFT Product Suite
RMFT Server Remote Administ
RMFT Server
RMFT Agents
Installs all of the RMFT components. For a description of a specific component, click the component.

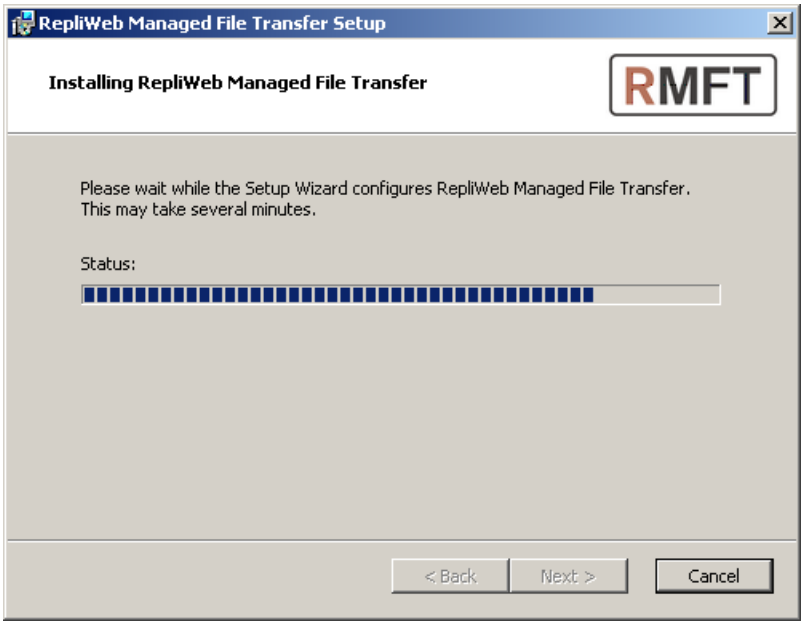
3. After you have selected the components you want to install, click **Next**.

The **Ready to Install** screen is displayed.

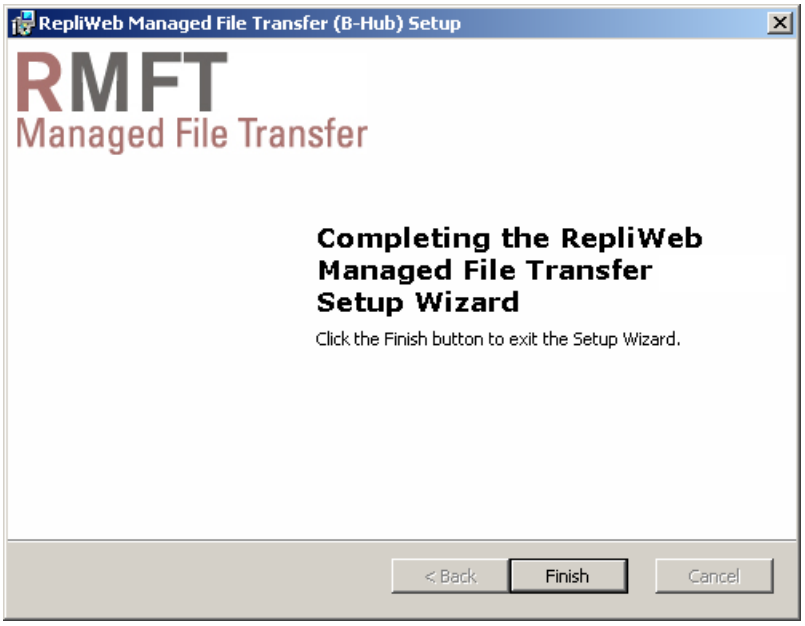

RepliWeb Managed File Transfer Setup
Ready to Install
The Setup Wizard is ready to install RMFT
RMFT
Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
< Back
Install
Cancel

4. Click **Install**.

The selected components are installed.


RepliWeb Managed File Transfer Setup
Installing RepliWeb Managed File Transfer
RMFT
Please wait while the Setup Wizard configures RepliWeb Managed File Transfer. This may take several minutes.
Status:
< Back
Next >
Cancel

After the selected components are installed, the final screen is displayed.



5. Click **Finish**.

Start Menu shortcuts for the installed RMFT component(s) (excluding CLI components) will be displayed under **Programs > RepliWeb > Managed File Transfer**

For operating instructions, refer to the related documentation (v).

4. Modifying, Repairing or Upgrading the Installation

You can modify your installation by removing components that you no longer require or by installing new components. You can also repair an installation (if, for example, one of the installation files is accidentally deleted or becomes corrupted) or upgrade the installation without needing to uninstall the current version.

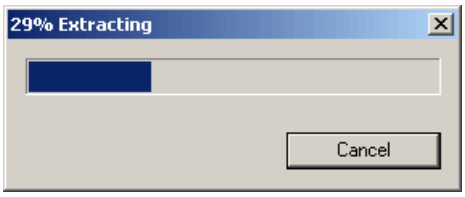
Modifying the Installation

To modify the installation:

1. Double-click the RMFT installation file (**RMFT_<*version*>.exe**).

   Note: On Windows Server 2008, right-click the **RMFT_<version>.exe** file and select **Run as administrator.**

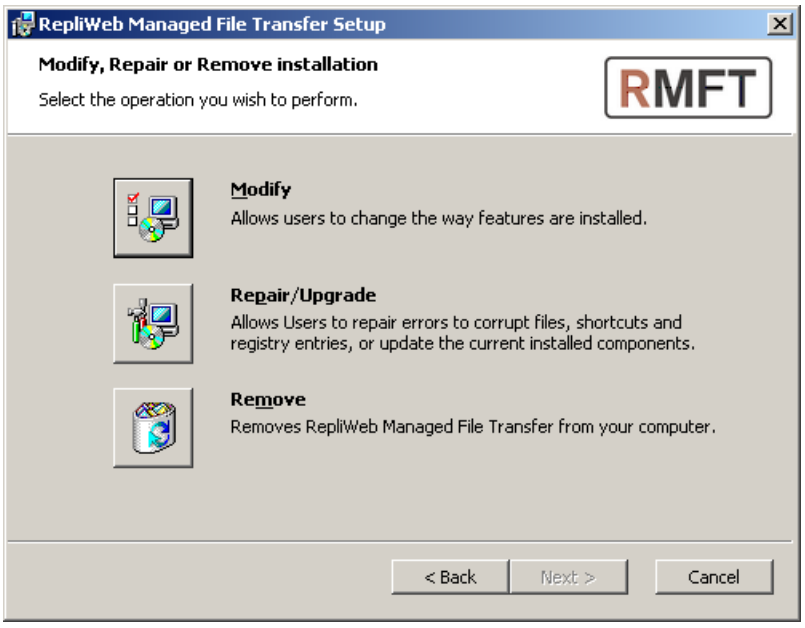
   The RMFT Setup files are extracted to a temporary directory:

   After the files are extracted, the Setup wizard opens and the **Welcome** screen is displayed.

2. Click **Next**.

The **Modify, Repair or Remove** installation screen is displayed.


RepliWeb Managed File Transfer Setup
Modify, Repair or Remove installation
Select the operation you wish to perform.
RMFT
Modify
Allows users to change the way features are installed.
Repair/Upgrade
Allows Users to repair errors to corrupt files, shortcuts and registry entries, or update the current installed components.
Remove
Removes RepliWeb Managed File Transfer from your computer.
< Back
Next >
Cancel

3. Click **Modify**.

   The **Custom Setup** screen is displayed.

   A description of each component is displayed in the area to the right of the available components.

4. To change the default installation directory, click **Browse** and select a different directory.
5. To install all of the components, click **Next**.
6. To install or remove specific components, continue from Step 2 of Installing Specific RMFT Components.

Reinstalling the DMZ RMFT Server to a Different Path

In a setup involving an internal RMFT Server and a DMZ RMFT Server, the DMZ RMFT Server's installation path is stored in a configuration file on the internal RMFT Server machine. If, for whatever reason (e.g. hardware failure), the DMZ RMFT Server needs to be reinstalled, installing it to a different path requires you to also perform the procedure below.

On the DMZ RMFT Server machine:

1. Install RMFT Server.
2. Configure it as the DMZ RMFT Server.
3. Restore the backed up configuration.
4. Execute the following query against the DMZ RMFT database:

```
select max(BH_id) from bh_package_reports
```

This will return the number of the last message received from the DMZ. Make a note of the number as it will be needed later on.

On the internal RMFT Server machine:

1. Edit the file C:\RMFT\Config**internal_external.cf**
2. Replace the values of the **Softlink_dir** and **Root Directory** fields with the new installation paths of the DMZ RMFT Server (the defaults are **C:\Program Files\Repliweb\RMFT** and **C:\RMFT** respectively)

   IMPORTANT: The path values are case sensitive. In other words, they must be specified exactly as defined on the RMFT Server machine. Even specifying a small drive letter is enough to cause an error.
3. Change the **Username** field to any value (at this stage the value is not important; it just needs to be different so the system can detect a change).
4. Save the changes.
5. Open RMFT Manager (various error messages pertaining to the DMZ will be displayed) and select **DMZ Front End** from the **Manage** menu.
6. Enter the correct username and then click **OK**.
7. Stop the "RMFT Admin Agent" service.
8. Edit the file ~\RMFT\Config**dmz_sync_report_ids.txt** and replace the middle number with the number returned in step 4 above.
9. Start the "RMFT Admin Agent" service.
10. Send a package from a DMZ user to a DMZ user.

Repairing or Upgrading the Installation

The upgrade procedure does not affect existing database connectivity settings or any other settings configured using the RMFT Site Configurator. For more information about RMFT site settings, see RMFT Site Configurator (23).

If you need to make any changes to database connectivity, you should uninstall the existing RMFT Product Suite before installing the newer version.

IMPORTANT: In systems consisting of an internal RMFT Server and a DMZ RMFT Server, the DMZ RMFT Server must be upgraded *before* the internal RMFT Server.

NOTE: For instructions on how to upgrade an RMFT Microsoft cluster installation, please refer to the *RMFT MS-Cluster Installation Guide*.

Before beginning the upgrade:

1. Back up your RMFT settings and packages as follows:
   a. Replace the existing RMFT backup utility with the one that was provided with the RMFT installation kit (refer to the readme for full instructions).

      Note: In a setup consisting of an internal RMFT Server and a DMZ RMFT Server, the backup procedure should be performed *on the internal RMFT Server only*. For detailed instructions, please refer to the *RMFT Administrator's Guide*.

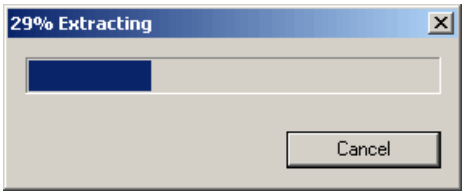
   b. Open RMFT Manager.
   c. From the **Manage** menu, select **Backup and Restore** > **Backup**.
2. Manually back up any customized website templates in ~\RepliWeb\RMFT\web\b-hub\translator and ~\RepliWeb\RMFT\web\b-hub\customizer. Also back up any customized files that you may have placed under the RMFT installation directory (~\RepliWeb\RMFT).
3. Install .NET Framework 3.5 Service Pack 1, available as a free download from: http://www.microsoft.com/Net/Download.aspx

To upgrade the currently installed components:

1. Double-click the RMFT installation file (**RMFT_*<version>*.exe**).

   Note: On Windows Server 2008, right-click the **RMFT_<version>.exe** file and select **Run as administrator.**

   The RMFT Setup files are extracted to a temporary directory:

   After the files are extracted the **Welcome** screen is displayed.
2. Click **Upgrade**.
3. Setup updates the currently installed components.

   When the currently installed components have been updated, the final screen is displayed.
4. Click **Finish**.
5. Open RMFT Manager and check the RMFT Health icon in the status bar.

   It should be .

5. Silently Installing RMFT Components

RMFT components can be installed silently (i.e. without requiring user interaction). This option is useful, for example, if you need to install RMFT Receiving Agents on several machines in your organization.

NOTE: On Windows Server 2008, to silently RMFT components under an account that is NOT the built-in administrator account, you need to first disable the UAC as follows:

1. Open the **Run** dialog box and type `uac`. Disable the UAC.
2. Restart the computer.
3. Silently install the desired component(s) as described below.
4. Enable the UAC.
5. Restart the computer.

Installing RMFT Administration Console

1. Right-click the RMFT installation .exe file and extract the contents to your preferred folder using 7-Zip. Or, open a DOS prompt, change the working directory to the one containing the RMFT installation **.exe** file and issue the following command:

   ```
   >RMFT_2.5038.43105.exe -extract_msi="c:\folder name"
   ```

   Your folder should now contain the **bhub.msi** and **vcredist_x86.exe** (Microsoft Visual C++ 2008 Redistributable Package (x86)) files.

2. Install Microsoft Visual C++ 2008 in silent mode by changing the working directory to the one containing the extracted files and then issuing the following command:

   ```
   >vcredist_x86.exe /q
   ```

3. After Microsoft Visual C++ 2008 is installed, issue the following command:

   ```
   >msiexec /i bhub.msi ADDLOCAL=Fe_Admin INSTALLLEVEL=3 /q ARPNOMODIFY=1 /l*v
   c:\setup.log
   ```

Upgrading the RMFT Administration Console

To upgrade the RMFT Administration Console, issue the following command:

```
>msiexec /fvasmue bhub.msi /q ARPNOMODIFY=1 /l*v c:\setup.log
```

Installing RMFT FASTCopy and/or SuperFAST Receiving Agents

RMFT Receiving Agents must be installed on any machine from or to which files are pulled/pushed using RMFT's FASTCopy and/or SuperFAST protocols. The RMFT Receiving Agents kit is provided by RepliWeb Support on an as needed basis.

1. Right-click the **RMFT_ReceivingAgents_<version>.exe** file (that you received from RepliWeb Support) and extract the contents to your preferred folder using 7-Zip. Or, open a DOS prompt, change the working directory to the one containing the RMFT Receiving Agents kit and issue the following command:

   ```
   >RMFT_ReceivingAgents_<version>.exe -extract_msi="c:\folder name"
   ```

   The target folder should now contain the **RmftReceivingAgents.msi** and **vcredist_x86.exe** (Microsoft Visual C++ 2008 Redistributable Package (x86)) files.

2. Install Microsoft Visual C++ 2008 in silent mode by changing the working directory to the one containing the extracted files and then issuing the following command:

   ```
   >vcredist_x86.exe /q
   ```

3. After Microsoft Visual C++ 2008 is installed, issue the following command:

   To install both FASTCopy and SuperFAST Receiving Agents:

   ```
   >msiexec /i RmftReceivingAgents.msi ADDLOCAL=Fe_FASTCopy_daemon,Fe_SuperFAST_daemon
   INSTALLLEVEL=3 /q ARPNOMODIFY=1 /l*v c:\setup.log
   ```

   To install only FASTCopy Receiving Agent:

   ```
   >msiexec /i RmftReceivingAgents.msi /q ARPNOMODIFY=1 /l*v c:\setup.log
   ```

Optional Parameters

Parameter	Description
`TARGETDIR="C:\Target Dir"`	Changes the default installation directory to the specified path.

Upgrading RMFT Receiving Agents

To upgrade the RMFT Receiving Agents installation, issue the following command:

```
>msiexec /fvasmue RmftReceivingAgents.msi /q ARPNOMODIFY=1 /l*v c:\setup.log
```

Installing RMFT Desktop Client

Note: RMFT Server must be installed prior to beginning the RMFT Desktop Client silent installation procedure.

1. Right-click the RMFT installation .exe file and extract the contents to your preferred folder using 7-Zip. Or, open a DOS prompt, change the working directory to the one containing the RMFT installation **.exe** file and issue the following command:

   ```
   >RMFT_<version>.exe -extract_msi="c:\folder name"
   ```

   The target folder should now contain the **bhub.msi** and **vcredist_x86.exe** (Microsoft Visual C++ 2008 Redistributable Package (x86)) files.

2. Install Microsoft Visual C++ 2008 in silent mode by changing the working directory to the one containing the extracted files and then issuing the following command:

   ```
   >vcredist_x86.exe /q
   ```

3. After Microsoft Visual C++ 2008 is installed, open a command prompt on the RMFT Server machine and change the working directory to the directory containing the `RmftDesktopClient.msi` file.

   The default installation directory is **~\RepliWeb\RMFT\DesktopClient** for installation on 32-bit machines or **~\RepliWeb\RMFT\DesktopClient\x64** for installation on 64-bit machines.

   Then, issue the following command:

   ```
   >msiexec /i RmftDesktopClient.msi /q ARPNOMODIFY=1 /l*v c:\setup.log
   ```

After completing the installation, it is recommended to perform the procedure described in Creating and Distributing Profiles below.

Optional Parameters

Parameter	Description
`TARGETDIR="C:\Target Dir"`	Changes the default installation directory to the specified path.
`INSTALLMODEACTION="SetAllUsers"`	Installs RMFT Desktop Client for all users.
`OFFICE2007_ADDIN=0`	Disables the Office 2007 Add-In.

Creating and Distributing Profiles

An RMFT Desktop Client profile contains RMFT Server connectivity information such as the RMFT Server name or IP address, the connection method and the user's login credentials (if required). To be able to send files, at least one "Profile" needs to reside on the user's computer. Unlike a standard installation during which a default profile is installed on the user's computer, the silent installation of RMFT Desktop Client does not install any profiles.

After the silent installation completes, you can create a RMFT Desktop Client profile and then distribute it to the computers installed with RMFT Desktop Client, using a suitable application (such as Active Directory).

To create and distribute a profile:

1. On the RMFT Server machine, run the RMFT Desktop Client installation file:

   ~\RepliWeb\RMFT\DesktopClient**RmftDesktopClient.msi**

   For detailed installation instructions, refer to the *RMFT Desktop Client Installation Guide*.

2. When the installation completes, create a new profile, remembering to select the **Shared profile** and **Use my Windows credentials** options.

   For detailed instructions, refer to the *RMFT Desktop Client User Guide*.

3. The profile settings are saved as an .xml file in:

   All Users\Application Data\RepliWeb\PackageSender**profiles.xml**

4. Distribute the profile file to the following directory on the users' computers:

   All Users\Application Data\RepliWeb\PackageSender\

5. Optionally, set the permissions of the **profiles.xml** file to read-only.

   In the RMFT Desktop Client **Profiles** window, shared profiles will be indicated by a icon whereas shared read-only profiles will be indicated by a icon.

Upgrading RMFT Desktop Client

To upgrade the RMFT Desktop Client installation, issue the following command:

```
>msiexec /fvasmue RmftDesktopClient.msi /q ARPNOMODIFY=1 /l*v c:\setup.log
```

A. RMFT Port Requirements

The required ports and firewall configuration are determined by three factors:

1. Your specific RMFT deployment (see below).
2. Which transfer protocols are used to pull/push files from/to hosts.
3. How end-users upload packages to RMFT Server (HTTP/S, FASTCopy, or SuperFAST).

Possible RMFT deployments are as follows:

- Single RMFT Server in the Intranet (49)
- Single RMFT Server in the DMZ (50)
- Two RMFT Servers (51)

Taking the above factors into consideration, this section explains how to configure your organization's firewall ports for each of the above deployments.

Single RMFT Server in the Intranet

Note The table below assumes that packages are being exchanged between internal and external users. If RMFT is only used in the internal network the issue of which ports to open is not relevant.

Component/Protocol	Port	Description
GQS	3102	This port only needs to be opened for inbound communication if you are using the RMFT Remote Administration Console to administrate RMFT Server from outside your organization.
Protocol: FASTCopy Used by: RMFT Enhanced CLI.	5745	Open this port for inbound communication if external users are using FASTCopy to upload files to RMFT Server. See also Host Port Requirements (53).
Protocol: SuperFAST Used by: RMFT Enhanced CLI.	5750	Open this port for inbound communication if external users are using SuperFAST to upload files to RMFT Server.

		See also Host Port Requirements (53).
Protocol: HTTP/S (LiteCopy) Used by: RMFT Web Client, RMFT Java CLI and RMFT CLI.	80/443	Open this port for inbound communication if external users are using HTTP/S to upload files to RMFT Server. See also Host Port Requirements (53).
S/MIME	25	Open this port for outbound communication if any of the external user accounts are configured to receive packages by e-mail.
FTP	21	See Host Port Requirements (53).
SSH/SFTP	22	
POP3	110	
IMAP	143	

Single RMFT Server in the DMZ

Component/Protocol	Port	Description
GQS	3102	**Firewall between RMFT Server and the internal network:** Open this port for outbound communication when administrating RMFT from the internal network. **Firewall between RMFT Server and the Internet:** Open this port for inbound communication when administrating RMFT from the Internet.
Protocol: FASTCopy Used by: RMFT Enhanced CLI.	5745	**Firewall between RMFT Server and the internal network:** Open this port for outbound communication if internal users are using FASTCopy to upload files to RMFT Server. **Firewall between RMFT Server and the Internet:** Open this port for inbound communication if external users are using FASTCopy to upload files to RMFT Server. See also Host Port Requirements (53).
Protocol: SuperFAST Used by: RMFT Enhanced CLI.	5750	**Firewall between RMFT Server and the internal network:** Open this port for outbound communication if internal users are using SuperFAST to upload files to RMFT Server. **Firewall between RMFT Server and the Internet:** Open this port for inbound communication if external users are using

		SuperFAST to upload files to RMFT Server. See also Host Port Requirements (53).
Protocol: HTTP/S (LiteCopy) Used by: RMFT Web Client, RMFT Java CLI and RMFT CLI.	80/443	**Firewall between RMFT Server and the internal network:** Open this port for outbound communication if internal users are using HTTP/S to upload files to RMFT Server. **Firewall between RMFT Server and the Internet:** Open this port for inbound communication if external users are using HTTP/S to upload files to RMFT Server. See also Host Port Requirements (53).
S/MIME	25	**Firewall between RMFT Server and the internal network:** Open this port for outbound communication if any of the external user accounts are configured to receive packages by e-mail. **Firewall between RMFT Server and the Internet:** Open this port for outbound communication if any of the external user accounts are configured to receive packages by e-mail.
FTP	21	See Host Port Requirements (53).
SSH/SFTP	22	
POP3	110	
IMAP	143	

Two RMFT Servers

Due to security and administrative considerations, an increasing number of organizations seek to insulate their internal network from the outside world. RMFT's DMZ Front End module addresses this need through the deployment of two RMFT servers: one in the intranet and the other in the DMZ. This enables internal and external users to exchange files while preventing external users from accessing the internal network.

For a full description of the RMFT DMZ Front End module, refer to the *RMFT Administrator's Guide*.

Internal RMFT Server

Component/Protocol	Port	Description
GQS	3102	**Firewall between RMFT Server and the DMZ:** This port must be open for outbound communication. The internal RMFT Server connects to the DMZ Front End RMFT Server for the purpose of adding, deleting or editing external entities (users, hosts, etc.). **Firewall between RMFT Server and the Internet:** Open this port for inbound communication when administrating RMFT Server and the Internet.
FASTCopy	5745	**Firewall between RMFT Server and the DMZ:** This port must be open for outbound communication. The internal RMFT Server uses FASTCopy to send and retrieve Admin packages to and from the DMZ Front End RMFT Server. See also Host Port Requirements (53).
SuperFAST	5750	See Host Port Requirements (53).
HTTP/S (LiteCopy)	80/443	
FTP	21	
SSH/SFTP	22	
POP3	110	
IMAP	143	

RMFT DMZ Front End Server

Component/Protocol	Port	Description
Protocol: FASTCopy Used by: RMFT Enhanced CLI.	5745	**Firewall between RMFT Server and the Internet:** Open this port for inbound communication if external users are using FASTCopy to upload files to RMFT Server. See also Host Port Requirements (53).
Protocol: SuperFAST Used by: RMFT Enhanced CLI.	5750	**Firewall between RMFT Server and the Internet:** Open this port for inbound communication if external users are using

		SuperFAST to upload files to RMFT Server. See also Host Port Requirements (53).
Protocol: HTTP/S (LiteCopy) Used by: RMFT Web Client, RMFT Java CLI and RMFT CLI.	80/443	**Firewall between RMFT Server and the Internet:** Open this port for inbound communication if external users are using HTTP/S to upload files to RMFT Server. See also Host Port Requirements (53).
S/MIME	25	**Firewall between RMFT Server and the internal network:** Open this port for outbound communication if any of the external user accounts are configured to receive packages by e-mail. **Firewall between RMFT Server and the Internet:** Open this port for outbound communication if any of the external user accounts are configured to receive packages by e-mail.
FTP	21	See Host Port Requirements (53).
SSH/SFTP	22	
S/MIME	25	
POP3	110	
IMAP	143	

Host Port Requirements

When pulling or pushing files from/to hosts the following rules are generally applicable. The firewall between RMFT Server and the internal network/Internet (depending on the location of the host) should be configured to allow outbound communication through the protocol port. The firewall behind which the Host is located should be configured to allow inbound communication through the protocol port.

B. Installing RMFT in an Existing RMFT Environment

If disk failure occurs or if the RMFT Server machine has reached End-of-Life and needs replacing, you can install RMFT on top of the existing RMFT environment.

Note: Although the same results can be achieved by performing a complete backup followed by a new installation and restore, such a procedure is less suitable for production systems that require constant availability.

To install RMFT in an existing RMFT environment, the RMFT environment must already contain the following elements:

- The installation directory defined during the original installation
- The root directory defined during the original site configuration
- The RMFT database created during the original installation

IMPORTANT: If any of the above elements is either missing or corrupt, the procedure described below will not work.

Example of scenarios in which RMFT can be installed on top of an existing RMFT environment are as follows:

a. RMFT cluster setup – The primary machine has reached End-of-Life and needs to be replaced.

Note: While failover capability can also be achieved without a primary machine (i.e. by installing an additional secondary machine), cluster setups that only contain secondary machines *will not be upgradeable*.

b. A single RMFT Server machine with two disks – RMFT is installed on disk X. Due to disk failure, disk Y (the system disk) has been replaced.

c. RMFT DMZ front end setup – Same as **b.** above.

To install RMFT in an existing environment:

1. Optionally (but recommended), back up RMFT Server.

For instructions on backing up RMFT Server, please refer to the *RMFT Administrator's Guide*.

2. Open a command prompt and change the working directory to the directory containing the RMFT setup file.

   IMPORTANT: The RMFT setup file must be the same version as the existing installation.

3. Issue the following command:

   ```
   RMFT_<version>.exe –existing_site
   –rmft_installation_directory=<installation directory>
   –rmft_root_directory=<rmft root directory>
   ```

   Note: In a standalone setup, the <installation directory> must be the directory specified during the original installation. Similarly, the <rmft root directory> must be the directory specified during the original installation. In a cluster setup, the <installation directory> should be the existing shared installation path. For instructions on installing RMFT in an MS-Cluster, please refer to the manual: *Installing RMFT on an MS-Cluster*.

   The RMFT installation wizard opens.

4. Click **Next** until the installation completes.

C. Moving the RMFT Installation or Database to another Machine

In certain situations - for example, to improve performance - you may need to migrate the RMFT installation or the RMFT database to a new machine. This appendix outlines the steps needed to perform such migrations, both in a standalone environment (i.e. a single RMFT Server) and in a DMZ environment (i.e. two RMFT Servers: one in the internal network and the other in the DMZ).

Note: Some of the procedures below require you to back up and restore packages and settings using RMFT's Backup and Restore feature. For a complete description of the Backup and Restore feature, please refer to the *RMFT Administrator's Guide*.

Migrating the RMFT Installation

Migrating the RMFT Installation in a Standalone Environment

1. Back up the RMFT packages and settings using RMFT's Backup and Restore feature.
2. Optionally, delete the RMFT database. This is only necessary if you want to use the same database name in the new installation.
3. Install RMFT on the new machine. If you did not delete the database, you will need to specify a different database name during the Site Configuration stage of the installation.
4. Restore the packages and settings using RMFT's Backup and Restore feature.

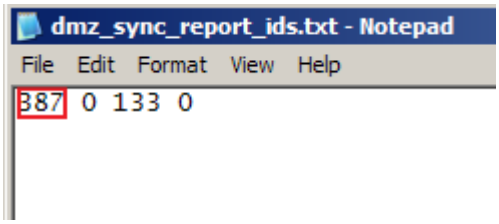
Migrating the Internal RMFT Installation in a DMZ Environment

1. Back up the RMFT packages and settings using RMFT's Backup and Restore feature.
2. Optionally, delete the internal RMFT database. This is only necessary if you want to use the same database name in the new installation.

3. Install RMFT on the new machine in the internal network. If you did not delete the database, you will need to specify a different database name during the Site Configuration stage of the installation.
4. Run the DMZ Setup Wizard and configure the RMFT Server to be the internal RMFT Server.
5. Restore the packages and settings to the new RMFT installation using RMFT's Backup and Restore feature.
6. On the database server, issue the following SQL command:

   ```
   select max(bh_id) from bh_package_reports
   ```

   The output will be a number.
7. Stop the RMFT Admin Agent service.
8. Open ~\RMFT\Config**dmz_sync_report_ids.txt** and replace the first number with the output of the SQL command.



9. Save the ~\RMFT\Config**dmz_sync_report_ids.txt** file and start the **RMFT Admin Agent** service.

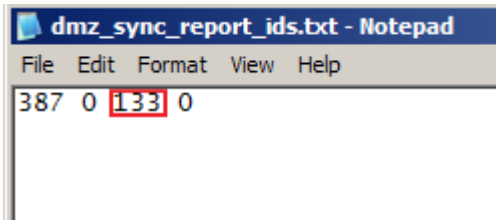
Migrating the DMZ RMFT Installation in a DMZ Environment

1. Back up the RMFT packages and settings using RMFT's Backup and Restore feature.
2. Optionally, delete the DMZ RMFT database. This is only necessary if you want to use the same database name in the new installation.
3. Allocate the decommissioned machine's IP address to the new machine.
4. Install RMFT on the new machine in the DMZ. If you did not delete the database, you will need to specify a different database name during the Site Configuration stage of the installation.
5. On the DMZ RMFT Server, run the DMZ Setup Wizard and configure the RMFT Server to be the DMZ RMFT Server.
6. Restore the packages and settings to the new RMFT installation using RMFT's Backup and Restore feature.
7. On the database server, issue the following SQL command:

   ```
   select max(bh_id) from bh_package_reports
   ```

   The output will be a number.
8. Stop the RMFT Admin Agent service.

9. Open ~\RMFT\Config**dmz_sync_report_ids.txt** *on the internal RMFT Server machine* and replace the third number with the output of the SQL command.



10. Save the ~\RMFT\Config**dmz_sync_report_ids.txt** file and start the **RMFT Admin Agent** service.

Migrating the RMFT Database

The same procedure should be followed when migrating the RMFT database in a standalone environment or in an Internal-DMZ environment.

1. Back up the RMFT packages and settings using RMFT's Backup and Restore feature.
2. Stop the RMFT Services.
3. Using SQL's/Oracle's database export option, export the RMFT database from the current database server.
4. Using SQL's/Oracle's database import option, import the RMFT database to the new database server.
5. Open ~\RMFT\Config**bhub.cf** and edit it as follows:
   a. Locate the `[Database]` section.
   b. Replace the **Server** parameter value with the IP address/hostname of the new database machine and then save the file.
6. Start the RMFT Services.
7. If necessary (i.e. if the database login credentials have changed), update the credentials used by RMFT to access the database as follows:
   a. Open a DOS prompt and change the working directory to:

      ~ \RepliWeb\RMFT\b-hub\bin>

   b. Issue the following command:

      ```
      ~RepliWeb\RMFT\b-hub\bin>rmft_credentials_cli database
      -user=new_username -pass=new_password
      ```

      Where ***new_username*** is the new database username and ***new_password*** is the new database password.